WHAT IS CLAIMED IS:

1.   A system for collaborative engineering, said system comprising:

an open architecture module that provides data in its native format;

an autonomous agent module that sets business rules, sets and responds to trigger criteria, and gathers the data provided by the open architecture module;

a workflow manager module that polices and enforces the business rules in data routing so that individual departments, organizations, and individuals are notified that the data was provided by the open architecture module and performs specific tasks in an order in accordance with the business rules established by the autonomous agent module;

an infrastructure connectivity module that provides a notification pathway for the workflow manager to route data by establishing and maintaining communication links between the individuals, departments, and organizations to allow collaboration;

a report engine module for extracting, formatting, and delivering data routed by the workflow manager module;

a root cause analyzer module that analyzes data routed by the workflow manager module, sets an alarm level to detect unwanted occurrences in the data, sets exclusions for the detection of unwanted data, determines the cause of the unwanted occurrence, and removes the cause of the unwanted occurrence;

a data mining module that analyzes data routed by the workflow manager module to a database using tools and applications that look for trends and anomalies in the data; and

a user interface to access the open architecture module, the autonomous agent module, the workflow manager module, the infrastructure connectivity module, the report engine module, the root cause analyzer module, and the data mining module.

2.   The system for collaborative engineering of claim 1, wherein the autonomous agent module analyzes the data and compiles trend information regarding the data.

3.   The system for collaborative engineering of claim 2, wherein the autonomous agent module executes a predetermined action if the trend information meets a trigger criterion.

4.   The system for collaborative engineering of claim 3, wherein the predetermined action is to notify a designated user that the trend information met the trigger criteria.

5.   The system for collaborative engineering of claim 3, wherein the predetermined action is to execute a change affecting at least one of the group consisting of: the open architecture module, the autonomous agent module, the workflow module, the infrastructure connectivity module, the report engine module, the root cause analyzer module and the data mining module.

6.   A system for collaborative engineering, said system comprising:

a first data module that provides data in its native format;

a second data module that sets business rules, sets and responds to trigger criteria, and gathers the data provided by the first module; and

a third module that polices and enforces the business rules in routing data so that individual departments, organizations, and individuals are notified that the data was provided by the first module, the third module performing specific tasks in an order in accordance with the business rules established by the second module.

7.   The system for collaborative engineering of claim 6, wherein the second data module further comprises:

a first sub-module that analyzes the data and compiles trend information regarding the data.

8.   The system for collaborative engineering of claim 7, wherein the second data module executes a predetermined action if the trend information meets a trigger criterion.

9.   The system for collaborative engineering of claim 8, wherein the predetermined action is to notify a designated user that the trend information met the trigger criteria.

10.   The system for collaborative engineering of claim 8, wherein the predetermined action is to execute a change affecting at least one of the group consisting of: the open architecture module, the autonomous agent module, the workflow module, the infrastructure connectivity module, the report engine module, the root cause analyzer module and the data mining module.

11.   A method for collaborative systems engineering, said method comprising the steps of:

identifying an author of a resource;

storing the resource in a native format from which the author created the resource;

converting the resource into discrete data objects;

identifying users of the data objects and the applications that each user requires to use the data objects;

creating a network of pathways linking the author of the resource and the users of the data objects together with applications necessary for each of the users to access and use the data objects; and

delivering the data objects to each of the users with applications necessary for each of the users to access and use the delivered data objects.

12.   The method for collaborative systems engineering of claim 11 further comprising analyzing the data objects and compiling trend information regarding the data objects.

13.   The method for collaborative systems engineering of claim 12, further comprising executing a predetermined action if the trend information meets a trigger criterion.

14.   The method for collaborative systems engineering of claim 13, wherein the predetermined action is to notify a designated user that the trend information met the trigger criteria.

15.   The method for collaborative systems engineering of claim 13, wherein the predetermined action is to execute a change affecting at least one of the group consisting of: the open architecture module, the autonomous agent module, the workflow module, the infrastructure connectivity module, the report engine module, the root cause analyzer module and the data mining module.

16.   A method for collaborative systems engineering, said method comprising the steps of:

creating a requirements object for a project;

creating a requirements function for an element of the project based upon the requirements object;

identifying a subsystem of the project that performs the requirements function;

identifying components included in the subsystem;

associating document files to the requirements function based upon the relationship of the document files to the requirements object;

converting the document files into discrete data objects;

identifying authors of the data objects and the applications that each author requires to create the document files;

identifying users of the data objects and the applications that each user requires to use the data objects;

creating a network of pathways linking the authors of the documents and the users of the data objects together with applications necessary for each of the users to access and use the data objects; and

delivering the data objects to each of the users with applications necessary for each of the users to access and use the delivered data objects.

17.   The method for collaborative systems engineering of claim 16 further comprising analyzing the data objects and compiling trend information regarding the data objects.

18.   The method for collaborative systems engineering of claim 17, further comprising executing a predetermined action if the trend information meets a trigger criterion.

19.   The method for collaborative systems engineering of claim 18, wherein the predetermined action is to notify a designated user that the trend information met the trigger criteria.

20.   The method for collaborative systems engineering of claim 18, wherein the predetermined action is to execute a change affecting at least one of the group consisting of: the open architecture module, the autonomous agent module, the workflow module, the infrastructure connectivity module, the report engine module, the root cause analyzer module and the data mining module.

21.   A method for collaborating in a systems engineering enterprise, said method comprising the steps of:

creating a document for use in determining an asset life cycle including design, production, distribution, support, and disposal scenarios;

coding the document with author information, user information, and business process information;

storing the document in a database;

linking the document in the database to the business process information relating to activities performed by the enterprise during the asset life cycle;

delivering data contained in the document from the database to a user based upon the user information and in response to triggers established based upon the business process information.

22.   The method for collaborating in a systems engineering enterprise of claim 21, wherein prior to the step of storing document in the database, the document is converted to a binary stream and stored in that format.

23.   The method for collaborating in a systems engineering enterprise of claim 21, wherein prior to the step of storing document in the database, the document is converted to an XML string and stored in that format.

24.   A collaborative method of specifying, designing, producing, delivering, monitoring, supporting, and retiring products and processes in a business enterprise by effectively managing elements in a systems engineering and advanced logistic support chain from design to disposal, the method comprising:

creating a requirements object for individual elements of the systems engineering and advanced logistic support chain outlining the purpose of each element, the contexts in which the element will be used, and constraints imposed upon the element;

creating at least one document describing the requirements object and linking the requirements object with affected elements of the chain and with users of the requirements object through a requirements database;

creating a requirements function for an element of the chain based upon the requirements object;

identifying a subsystem of the element that performs the requirements function;

identifying components included in the subsystem;

updating the requirements database to link the requirements object to the users of the requirements object, the document describing the requirements object, the elements of the chain, the subsystem of the element that performs the requirements function, and the components included in the subsystem; and

associating the at least one document file to the requirements function, the subsystem, and the plurality of components included in the subsystem based upon the relationship of the document file to the requirements object.

25.   A data storage medium with computer-executable instructions for performing collaborative systems engineering, the data storage medium comprising:

instructions for identifying an author of a resource;

instructions for storing the resource in a native format from which the author created the resource;

instructions for converting the resource into discrete data objects;

instructions for identifying users of the data objects and the applications that each user requires to use the data objects;

instructions for creating a network of pathways linking the author of the resource and the users of the data objects together with applications necessary for each of the users to access and use the data objects; and

instructions for delivering the data objects to each of the users with applications necessary for each of the users to access and use the delivered data objects.

26.   The data storage medium with computer-executable instructions of claim 25 further comprising instructions for analyzing the data objects and compiling trend information regarding the data objects.

27.   The data storage medium with computer-executable instructions of claim 26, further comprising instructions for executing a predetermined action if the trend information meets a trigger criterion.

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28.   The data storage medium with computer-executable instructions of claim 27, wherein the instructions for executing a predetermined action further comprise instructions for notifying a designated user that the trend information met the trigger criteria.

29.   The data storage medium with computer-executable instructions of claim 27, wherein the instructions for executing a predetermined action further comprise instructions for executing a change affecting at least one of the open architecture module, the autonomous agent module, the workflow module, the infrastructure connectivity module, the report engine module, the root cause analyzer module, or the data mining module.

30.   A workstation for administering collaborative systems engineering, the workstation comprising:

an open architecture module that provides data in its native format;

an autonomous agent module that sets business rules, sets and responds to trigger criteria, and gathers the data provided by the open architecture module;

a workflow manager module that polices and enforces the business rules in data routing so that individual departments, organizations, and individuals are notified that the data was provided by the open architecture module and performs specific tasks in an order in accordance with the business rules established by the autonomous agent module;

an infrastructure connectivity module that provides a notification pathway for the workflow manager to route data by establishing and maintaining communication links between the individuals, departments, and organizations to allow collaboration;

a report engine module for extracting, formatting, and delivering data routed by the workflow manager module;

a root cause analyzer module that analyzes data routed by the workflow manager module, sets an alarm level to detect unwanted occurrences in the data, sets exclusions for the detection of unwanted data, determines the cause of the unwanted occurrence, and removes the cause of the unwanted occurrence;

a data mining module that analyzes data routed by the workflow manager module to a database using tools and applications that look for trends and anomalies in the data; and

a user interface to access the open architecture module, the autonomous agent module, the workflow manager module, the infrastructure connectivity module, the report engine module, the root cause analyzer module, and the data mining module.

31.   The workstation of claim 30, wherein the autonomous agent module analyzes the data and compiles trend information regarding the data.

32.   The workstation of claim 31, wherein the autonomous agent module executes a predetermined action if the trend information meets a trigger criterion.

33.   The workstation of claim 32, wherein the predetermined action is to notify a designated user that the trend information met the trigger criteria.

34.   The workstation of claim 32, wherein the predetermined action is to execute a change affecting at least one of the open architecture module, the autonomous agent module, the workflow module, the infrastructure connectivity module, the report engine module, the root cause analyzer module, or the data mining module.

35.   A workstation for administering collaborative systems engineering, the workstation comprising:

a first data module that provides data in its native format;

a second data module that sets business rules, sets and responds to trigger criteria, and gathers the data provided by the first module; and

a third module that polices and enforces the business rules in routing data so that individual departments, organizations, and individuals are notified that the data was provided by the first module, the third module performing specific tasks in an order in accordance with the business rules established by the second module.

36.   The workstation of claim 35, wherein the second data module further comprises:

a first sub-module that analyzes the data and compiles trend information regarding the data.

37.   The workstation of claim 36, wherein the second module executes a predetermined action if the trend information meets a trigger criterion.

38.   The workstation of claim 37, wherein the predetermined action is to notify a designated user that the trend information met the trigger criteria.

39.   The workstation of claim 37, wherein the predetermined action is to execute a change affecting at least one of the open architecture module, the autonomous agent module, the workflow module, the infrastructure connectivity module, the report engine module, the root cause analyzer module, or the data mining module.